



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/883,302	06/19/2001	Jeffrey A. Bedell	53470.003004	9726
21967 7590 01/14/2010 HUNTON & WILLIAMS LLP INTELLECTUAL PROPERTY DEPARTMENT 1900 K STREET, N.W. SUITE 1200 WASHINGTON, DC 20006-1109			EXAMINER CHBOUKI, TAREK	
			ART UNIT 2165	PAPER NUMBER
			MAIL DATE 01/14/2010	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/883,302	BEDELL ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	TAREK CHBOUKI	2165	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 18 November 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## ***DETAILED ACTION***

### **Response to Amendment**

This Office action has been issued in response to Pre-Appeal Brief Review decision of reopen Prosecution 09/19/2008. Claims 1-24 are pending. Applicants' arguments have been carefully and respectfully considered and a new ground of rejection is made.

### **Response to arguments**

Applicant arguments are moot in view of the new ground of rejection.

### ***Claim Rejections - 35 USC § 101***

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

1. Claims 1-9 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claims 1-9 refer to a "system". As cited on page 2 of this instant specification, has provided evidence that the claimed system is a software per se, wherein a series of modules are to be executed. The claims do not define structural and functional descriptive material used in interrelationship between the computer software and the hardware like a memory or processor.

Descriptive material can be characterized as either "functional descriptive material" or "nonfunctional descriptive material." Both types of "descriptive material" are nonstatutory when claimed as descriptive material *per se*, 33 F.3d at 1360, 31 USPQ2d at 1759. When functional descriptive material is recorded on

Art Unit: 2165

some computer-readable medium, it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized. Compare *In re Lowry*, 32 F.3d 1579, 1583-84, 32 USPQ2d 1031, 1035 (Fed. Cir. 1994).

### Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-24 are rejected under 35 U.S.C. 102(e) as being anticipated by Sacki, Joji (hereinafter Sacki) US Publication No 2004/0039730.

As per claim 1, Sacki discloses:

**A system for automated generation of one or more query language statements comprising:**

**a syntax pattern selector module for selecting, in an automated process, a syntax pattern corresponding to a desired function provided to the syntax pattern selector module and a syntax standard for use in generating the one or more query language statements;**

(Fig. 4-5 and paragraph [0080], indicate the selection of definition of a language syntax pattern to replace variable and automatically generates a query statement)

**a statement assembly module for populating the syntax pattern in an automated process with an**

Art Unit: 2165

**argument data set associated with a desired data set provided to the statement assembly module as part of the process of generating the one or more query language statements;**

(Fig. 6 and paragraph [0080] and [0081], wherein the replacement of variable is “augmentation of data” used during query statement generation)

**and whereby at least one query language statement is assembled to be run against a data source to return the desired data set.**

(Paragraph [0066]).

As per claim 2, Saeki discloses:

**The system of claim 1, wherein the syntax pattern selector module selects the syntax pattern from a plurality of syntax patterns corresponding to a plurality of database management systems.**

(Paragraph [0033] and [0069] and [0133], indicate syntax analysis (selection) of the syntax patterns corresponding to multiple databases definitions) .

As per claim 3, Saeki discloses:

**The system of claim 1, wherein the syntax pattern selector module selects the syntax pattern from a plurality of syntax patterns based upon at least one selection variable.**

(Fig. 6 and paragraph [0080], indicate including a variable to establish the pattern).

As per claim 4, Saeki discloses:

**A system for generating one or more query language statements comprising:**

**a syntax pattern selector module for selecting a syntax pattern corresponding to a desired function and a syntax standard;**

(Fig. 4-5 and paragraph [0080], indicate the selection of definition of a language syntax pattern to replace variable and automatically generates a query statement)

**a statement assembly module for populating the syntax pattern with an argument data set associated with a desired data set;**

(Fig. 6 and paragraph [0080] and [0081], wherein the replacement of variable is “augmentation of data”)

**a structure generator module for generating a query structure based on the desired data set, the query structure providing a basis for identifying the desired function to be used by the syntax pattern selector module;**

(Fig. 4-5 and paragraph [0080], indicate the selection of definition of a language syntax pattern to replace variable and automatically generates a query statement)

**and whereby at least one query language statement is assembled to be run against a data source to return the desired data set.**

(Paragraph [0066]).

As per claim 5, Saeki discloses:

**A system for generating one or more query language statements comprising:**

**a syntax pattern selector module for selecting a syntax pattern corresponding to a desired function and a syntax standard;**

(Fig. 4-5 and paragraph [0080], indicate the selection of definition of a language syntax pattern to replace variable and automatically generates a query statement)

**a statement assembly module for populating the syntax pattern with an argument data set associated with a desired data set;**

(Fig. 6 and paragraph [0080] and [0081], wherein the replacement of variable is “augmentation of data”)

**a function identifier module for identifying a functional element corresponding to the desired function and at least one syntax pattern;**

(Paragraph [0033] and [0080], Wherein the definition (identifier) corresponding retrieval request and generated query syntax).

**and whereby at least one query language statement is assembled to be run against a data source to return the desired data set.**

(Paragraph [0066]).

As per claim 6, Saeki discloses:

**A system for generating one or more query language statements comprising:**

**a syntax pattern selector module for selecting a syntax pattern corresponding to a desired function and a syntax standard;**

(Fig. 4-5 and paragraph [0080], indicate the selection of definition of a language syntax pattern to replace variable and automatically generates a query statement)

**a statement assembly module for populating the syntax pattern with an argument data set associated with a desired data set;**

(Fig. 6 and paragraph [0080] and [0081], wherein the replacement of variable is “augmentation of data”)

**an argument generator module for identifying the argument data set associated with the desired data set;**

(Fig. 6 and paragraph [0080] and [0081], wherein the replacement of variable is “augmentation of data” incorporated identifying the variable (dataset))

**and whereby at least one query language statement is assembled to be run against a data source to return the desired data set.**

(Paragraph [0066]).

As per claim 7, Saeki discloses:

**The system of claim 6, wherein the argument generator module identifies the argument data set based upon a syntax description associated with the desired function.**

(Fig. 6 and paragraph [0080] and [0081], wherein the replacement of variable is “augmentation of data” using definition information of a language syntax).

As per claim 8, Saeki discloses:

**The system of claim 1, wherein the system is a component in an online analytical processing system, a reporting system, a business intelligence system, or a data mining system.**

(Paragraph [0018], wherein the system is online analytical processing system).

As per claim 9, Saeki discloses:

**The system of claim 1, further comprising a plurality of driver modules, each of the driver modules including at least one syntax pattern associated with a selected database management system.**

(Paragraph [0033] and [0069] and [0075] and [0133], indicate syntax analysis (selection) of the syntax patterns corresponding to multiple databases definitions and wherein the logical item type definition is the driver module used to define or update syntax pattern) .

As per claim 10, Saeki discloses:

**A computer-implemented method of generating one or more query language statements to be run against a one or more data sources, comprising the steps, performed by a computer system, of: selecting a syntax pattern corresponding to a desired function provided as an input and a syntax standard for use in generating the one or more query language statements;**



(Fig. 4-5 and paragraph [0080], indicate the selection of definition of a language syntax pattern to replace variable and automatically generates a query statement)

**populating the syntax pattern with an argument data set associated with a desired data set provided as an input identifying the data set on which to operate from the data source as part of generating the one or more query language statements;**

(Fig. 6 and paragraph [0080] and [0081], wherein the replacement of variable is “augmentation of data” used during query statement generation)

**and wherein, the populated syntax pattern is used to generate one or more query language statements runnable against one or more data sources to return the desired data result set.**

(Paragraph [0066]).

As per claim 11, Saeki discloses:

**The method of claim 10, wherein the step of selecting the syntax pattern includes selecting the syntax pattern from a plurality of syntax patterns corresponding to a plurality of database management systems.**

(Paragraph [0033] and [0069] and [0133], indicate syntax analysis (selection) of the syntax patterns corresponding to multiple databases definitions) .

As per claim 12, Saeki discloses:

**The method of claim 10, wherein the step of selecting the syntax pattern includes selecting the syntax pattern from a plurality of syntax patterns based upon at least one selection variable.**

(Fig. 6 and paragraph [0080], indicate including a variable to establish the pattern).

Art Unit: 2165

As per claim 13, Sacki discloses:

**The method of claim 10, further comprising the step of generating a query structure based on the desired data set, the query structure providing a basis for identifying the desired function to be used in selecting the syntax pattern.**

(Fig. 4-5 and paragraph [0080], indicate the selection of definition of a language syntax pattern to replace variable and automatically generates a query statement)

As per claim 14, Sacki discloses:

**A method of generating one or more query language statements to be run against a one or more data sources, comprising the steps of:**

**selecting a syntax pattern corresponding to a desired function and a syntax standard;**

(Fig. 4-5 and paragraph [0080], indicate the selection of definition of a language syntax pattern to replace variable and automatically generates a query statement)

**populating the syntax pattern with an argument data set associated with a desired data set from the data source;**

(Fig. 6 and paragraph [0080] and [0081], wherein the replacement of variable is "augmentation of data")

**identifying a functional element corresponding to the desired function and at least one syntax pattern, the functional element providing a basis for selecting the syntax pattern;**

(Paragraph [0033] and [0080], Wherein the definition (identifier) corresponding retrieval request and generated query syntax).

**and wherein, the populated syntax pattern comprises one or more query language statements runnable against one or more data sources to return the desired data result set.**

(Paragraph [0066]).

Art Unit: 2165

As per claim 15, Sacki discloses:

**The method of claim 10, further comprising the step of identifying at least one selection variable for selecting the syntax pattern from a plurality of syntax patterns.**

(Paragraph [0033] and [0069] and [0133], indicate syntax analysis (selection) of the syntax patterns corresponding to multiple databases definitions) .

As per claim 16, Sacki discloses:

**A method of generating one or more query language statements to be run against a one or more data sources, comprising the steps of:**

**selecting a syntax pattern corresponding to a desired function and a syntax standard;**

(Fig. 4-5 and paragraph [0080], indicate the selection of definition of a language syntax pattern to replace variable and automatically generates a query statement)

**populating the syntax pattern with an argument data set associated with a desired data set from the data source;**

(Fig. 6 and paragraph [0080] and [0081], wherein the replacement of variable is “augmentation of data”)

**identifying the argument data set associated with the desired data set;**

(Fig. 6 and paragraph [0080] and [0081], wherein the replacement of variable is “augmentation of data” incorporated identifying the variable (dataset))

**and wherein, the populated syntax pattern comprises one or more query language statements runnable against one or more data sources to return the desired data result set.**

(Paragraph [0066]).

As per claim 17, Sacki discloses:

Art Unit: 2165

**The method of claim 16, wherein the step of identifying the argument data set includes identifying the argument data set based upon a syntax description associated with the desired function.**

(Fig. 6 and paragraph [0080] and [0081], wherein the replacement of variable is “augmentation of data” incorporated identifying the variable (dataset))

As per claim 18, Sacki discloses:

**The method of claim 10, wherein the method is executed in an online analytical processing systems, a reporting system, a business intelligence system, or a data mining system.**

(Paragraph [0018], wherein the system is online analytical processing system).

As per claim 19, Sacki discloses:

**The method of claim 10, wherein the step of selecting the syntax pattern includes accessing a plurality of driver modules including at least one syntax pattern, each of the plurality of driver modules corresponding to a selected database management system.**

(Paragraph [0033] and [0069] and [0075] and [0133], indicate syntax analysis (selection) of the syntax patterns corresponding to multiple databases definitions and wherein the logical item type definition is the driver module used to define or update syntax pattern) .

As per claim 20, Sacki discloses:

**A tangible medium having a computer readable program code embodied therein for generating one or more query language statements through an automated computer-implemented method comprising:**

**code for causing the processor to identify a functional element corresponding to a desired function for use in generating the one or more query language statements;**

(Paragraph [0033] and [0080], Wherein the definition (identifier) and syntax analysis corresponding retrieval request and generated query syntax).

**code for causing the processor to identify an argument data set associated with a desired data set and the identified functional element as part of generating the one or more query language statements;**

(Fig. 6 and paragraph [0080] and [0081], wherein the replacement of variable is “augmentation of data” incorporated identifying the variable (dataset))

**code for causing the processor to select a syntax pattern corresponding to the functional element;**

(Paragraph [0033] and [0080], Wherein the definition (identifier) and syntax analysis corresponding retrieval request and generated query syntax).

**and code for causing the processor to populate the selected syntax pattern with the identified argument data set to assemble at least one query language statement to be run against a data source to return the desired data set.**

(Paragraphs [0066] and [0080] and [0081], wherein the replacement of variable is “augmentation of data” used during query statement generation to be executed against a database and retrieve desired information).

As per claim 21, Saeki discloses:

**A method of generating a query language statement from computer code embodied on a computer readable media comprising the steps of:**

**defining a syntax pattern accessible to a system for generating a query language statement;**

(Fig. 4-5 and paragraph [0080], indicate the selection of definition of a language syntax pattern to replace variable and automatically generates a query statement)

Art Unit: 2165

**accessing the defined syntax pattern from the system to generate a query language statement;**

(Fig. 4-5 and paragraph [0080], indicate the selection of definition of a language syntax pattern to replace variable and automatically generates a query statement)

**and wherein the system does not need to be recompiled as a result of defining the syntax pattern.**

(Fig. 4-5 and paragraph [0080], indicate the selection of definition of a language syntax pattern to replace variable and automatically generates a query statement)

As per claim 22, Saeki discloses:

**The method of claim 21, wherein the syntax pattern is associated with a selected database management system.**

(Paragraph [0033] and [0069] and [0133], indicate syntax analysis (selection) of the syntax patterns corresponding to multiple databases definitions) .

As per claim 23, Saeki discloses:

**A tangible medium having a computer readable program code embodied therein for generating one or more query language statements comprising:**

**code for causing the processor to identify a functional element corresponding to a desired function;**

(Paragraph [0033] and [0080], Wherein the definition (identifier) and syntax analysis corresponding retrieval request and generated query syntax).

**code for causing the processor to identify an argument data set associated with a desired data set and the identified functional element;**

(Paragraph [0033] and [0080] and [0081], Wherein the definition (identifier) corresponding retrieval request and generated query syntax).

**code for causing the processor to select a syntax pattern corresponding to the functional element;**

(Paragraph [0033] and [0080], Wherein the definition (identifier) corresponding retrieval request and generated query syntax).

**code for identifying a functional element corresponding to the desired function and at least one syntax pattern, the functional element providing a basis for selecting the syntax pattern;**

(Paragraph [0033] and [0080], Wherein the definition (identifier) and syntax analysis corresponding retrieval request and generated query syntax).

**and code for causing the processor to populate the selected syntax pattern with the identified argument data set to assemble at least one query language statement to be run against a data source to return the desired data set.**

(Paragraphs [0066] and [0080] and [0081], wherein the replacement of variable is “augmentation of data” used during query statement generation to be executed against a database and retrieve desired information).

As per claim 24, Saeki discloses:

**A tangible medium having a computer readable program code embodied therein for generating one or more query language statements comprising:**

**code for causing the processor to identify a functional element corresponding to a desired function;**

(Paragraph [0033] and [0080], Wherein the definition (identifier) and syntax analysis corresponding retrieval request and generated query syntax).

**code for causing the processor to identify an argument data set associated with a desired data set and the identified functional element;**

(Fig. 6 and paragraph [0080] and [0081], wherein the definition syntax information manages the replacement of variable is “augmentation of data” incorporated identifying the variable (dataset))

**code for causing the processor to select a syntax pattern corresponding to the functional element;**

(Paragraph [0033] and [0080], Wherein the definition (identifier) and syntax analysis corresponding retrieval request and generated query syntax).

**code for identifying the argument data set associated with the desired data set;**

(Paragraph [0080] and [0081], wherein the definition syntax information manages the replacement of variable is “augmentation of data” incorporated identifying the variable (dataset))

**and code for causing the processor to populate the selected syntax pattern with the identified argument data set to assemble at least one query language statement to be run against a data source to return the desired data set.**

(Paragraphs [0066] and [0080] and [0081], wherein the replacement of variable is “augmentation of data” used during query statement generation to be executed against a database and retrieve desired information).

### **Conclusion**

For the prior art made of record and not relied upon is considered pertinent to applicant's disclosure, please refer to the Notice of Reference form.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tarek Chbouki whose telephone number is 571-2703154. The examiner can normally be



Art Unit: 2165

reached on Mon-Fri 7:30 am to 5:00 pm EST. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chace Christian can be reached on 5712724190. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Tarek Chbouki/

Examiner, Art Unit 2165

11/18/2008

/Luke S. Wassum/  
Primary Examiner  
Art Unit 2167